

**REMARKS****I. Introduction**

In response to the Office Action dated May 12, 2006, claim 28 has been amended. Claims 1-17, 19-35, and 37-49 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

**II. Non-Art Rejection**

In paragraphs (3)-(4), the Office Action rejected claims 28 and 46 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. According to the Office Action, the Examiner is unclear as to what is meant by the "ordered schedule of channels" because it is unclear how the ordered schedule of channels can be reordered into sequential order if the ordered schedule of channels are already in sequential order. The Applicant has amended claim 28 to clarify its meaning. Claim 46 needs no amendment.

Claim 19 recites the step of prioritizing the channel of schedules according to a duration of a time period for which each channel is tuned by prioritizing according to a duration of a time period between each of the series of commands. Claim 21 recites that the schedule of channels (which at this point, is sequentially ordered) is reordered according to the duration of the time period between each of the series of commands. At this point, the command is no longer in sequential order (where it began in claim 19). Claim 26 recites that that reordered schedule is reordered back into sequential order, and as amended, claim 28 recites the circumstances under which the reordered schedule is reordered back into sequential order.

The Office Action asks how the ordered schedule of channels can be reordered into sequential order if they are already in sequential order. The answer is that after claim 21, the channels are no longer in sequential order, claim 26 places the channels back into sequential order, and claim 28 recites further detail regarding the circumstances in which the reordering back into sequential order is accomplished.

The foregoing also applies to claim 46.

### III. The Cited References and the Subject Invention

#### A. The Amano Reference

U.S. Patent No. 5,323,240, issued June 21, 1994 to Amano et al. disclose a television receiver that automatically keeps track of favorite channels to facilitate tuning. A TV receiver has a tuner and a controller for controlling a tuning operation of the tuner. The controller includes a calculation unit for effecting a calculation of preferred stations using as parameters tuned channels and the times for which the channels are selected. A tuning frequency arrangement storing unit determines the channels that are frequently watched by a user on the basis of the calculation and stores indications of the channels. The channel indications thus stored are read out in ranked order to perform a tuning operation in response to successive actuation of a preferred-station key.

#### B. The Bedard Reference

U.S. Patent No. 5,801,747, issued September 1, 1998 to Bedard discloses a method and apparatus are disclosed for monitoring television viewing activity to determine preferred categories of programming and preferred channels of a viewer. To facilitate viewer access to preferred programming, the display of an electronic program guide may be configured in accordance with the monitored viewing activity to provide fast access to the preferred programming. The monitored viewing activity may also be used to provide a lock-out feature to prevent or limit the viewing of specified channels or categories of programming, or to identify and provide information of interest from the internet. In yet another embodiment of the invention, a viewer may automatically circulate through his or her preferred programming, as determined by monitoring the viewing activity of that viewer.

#### C. The Candelore Reference

U.S. Publication No. 2002/0104081, issued August 1, 2002 to Candelore et al. disclose a method and system are disclosed in which a tuning event is detected. Relative statistics are maintained on one or more items related to the tuning event. A list of favorites is created automatically based on the maintained relative statistics. By using relative statistics, ranking of favorites can be maintained efficiently within limited system resources. Furthermore, a viewer can be presented with a selection of favorites based on a number of items without having to program manually the list of favorites.

#### D. The Trovato Reference

U.S. Patent No. 6,445,306, issued September 3, 2002 to Trovato et al. disclose a remote control system in which a program-up or program-down activation on a control remote device effects the selection of the next or prior available channel that is likely to contain a program of a particular selected genre, or category. The system includes an identification of those programs that are likely to relate to each particular category. When the user selects a category, the user incrementally selects from the programs contained within the selected category. In the system, a list builder includes a number of capabilities for improving the selective quality of the program selection, having access, for example, to an information source that provides the time of each scheduled program on each channel, and an indication of each program's genre, rating, and other related items.

#### E. The Wugofski Reference

U.S. Publication No. 2003/0056216, issued March 20, 2003 to Wugofski et al. disclose a system for managing favorite channel lists on a television, personal computer or PC/TV convergence environment is disclosed. The favorite channel lists are dynamically created by a computerized system rather than manually created by a user who specifically identifies a set of channels to be included in the favorite channel list. In one embodiment of the invention, the computerized system generates a list of favorite channels based on a theme selected by the user. In another embodiment of the invention, the computerized system generates a list of favorite channels based on the channels most frequently viewed by the user.

#### IV. Office Action Prior Art Rejections

In paragraphs (1)-(2), the Office Action rejected claims 1-5, 8-9, 15-16, 19-23, 26-27, 34, 37-41, and 44-45 under 35 U.S.C. §102(e) as being anticipated by Amano et al., U.S. Patent No. 5,323,240 (Amano). The Applicant respectfully traverses these rejections.

With Respect to Claim 1: Claim 1 recites:

*A method of computing a schedule of channels, comprising the steps of:  
accepting channel surfing commands having a series of commands to tune a plurality of channels sequentially from an ordered schedule of channels;  
determining a duration of a time period during which each channel is tuned by the series of commands; and  
prioritizing the schedule of channels according to the duration of the time period during which each channel is tuned by the series of commands.*

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According to the Office Action, the step of “accepting channel surfing commands having a series of commands to tune a plurality of channels sequentially from an ordered set of channels” is disclosed as follows:

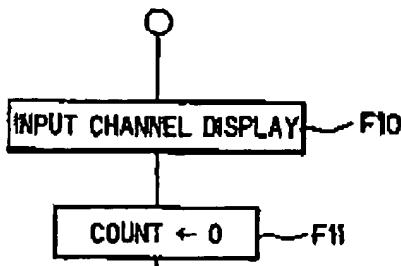


FIG. 3 is a flowchart for a series of processes for storing a tuning frequency when a channel key is manipulated.

First, when a channel key (hereinafter referred to as “Ch key”) is input (manipulated) during the activation of the TV receiver, an input channel is displayed (F10), and a count time to the time counting circuit 9c is cleared (F11). Thereafter, the time counting operation is started to count a watching time for the input channel 20 until the F key or another channel key (F12) is input. The time counting circuit 9c is cleared when powered on, and its counting operation is started.

According to the Office Action, the foregoing discloses channel surfing commands having a series of commands to tune a plurality of channels sequentially from an ordered set of channels” because the foregoing discloses manipulating a “channel key”, which, in the Examiner’s words “is typically a channel up/down key that allows a user to channel surf through a schedule of channels.”

#### A. Amano Does not Expressly or Inherently Describe the “Channel Key” as a “Channel Up/Down Key”

At issue is whether the “channel key” recited in the foregoing passage is a “channel up/down” key that is used to “accept channel surfing commands from an ordered schedule of channels” or not.

It is plain that the Amano patent does not expressly indicate that the “channel key” is a “channel up/ down key”. Since Amano does not expressly disclose this feature, it is inappropriate to rely on Amano in rejecting claim 1 unless it is *inherently* disclosed.

Inherency “may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1269(Fed. Cir. 1991). Instead, to establish inherency, the extrinsic

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evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill."

The issue, then, turns on whether Amano's "channel key" must necessarily be a "channel up/down" key.

Nothing about the Amano disclosure compels a conclusion that the disclosed "channel key" must be a "channel up/down key," or used to "channel surf." Accordingly, any reliance on the inherency doctrine to resolve the matter is misplaced.

#### B. Amano Uses Different Terminology to Describe Channel Surfing Keys

That the "channel key" described in the foregoing passage is not a "channel up/down key" as the Examiner assumes is also apparent from Amano itself. Specifically, Amano does describe the channel surfing functionality the Office Action attributes to the "channel key". But when it does so, it is careful to describe *two* input keys that are different from the "channel key" described above: "a channel UP key" and a "channel DOWN key".

In such a situation, if he searches a desired channel through a channel UP key or a channel DOWN key, the search operation is very cumbersome when the target channel is far from the current channel, and if he 45 searches a desired channel through ten keys, the search operation is very inconvenient because the number of the target channel is unknown.

Amano also teaches that use of these keys is undesirable. The clear inference is that the "channel key" and the "channel up key" and "channel down key" are not the same thing.

#### C. The Prior Art Teaches Against What the Office Action Suggests

As described above, Amano neither expressly nor inherently discloses that the "channel key" is a "channel up/down key." In fact, when the whole of the Amano is considered, it appears that the "channel key" is something different than the "channel UP key" and "channel DOWN key" described elsewhere in the disclosure.

It is also important to note that the other references of record, in particular, the Candelore (2002/010481) and Amano (5,585,865) references formerly relied upon, clearly teach away from the notion of using channel surfing commands to determine viewing favorites. Given that the currently relied upon Amano reference's teaching is at very best ambiguous in this respect, and the formerly relied upon Amano ('865) and Candelore ('481) reference teach away from what the Examiner

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suggests, the Applicant respectfully suggests that the rejection of claim 1 under 35 U.S.C. § 102(b) is improper and should be withdrawn.

Claims 16, 19, 34, and 37 recite features analogous to those of claim 1, and are patentable for the same reasons.

With Respect to Claims 5, 23, and 41: Claim recites that the ordered schedule of channels is reordered after all of the channels of the schedule of channel has been tuned. According to the Office Action, this is disclosed in FIG. 3 and as follows

The renewed ranking of the channel is stored in the memory circuit 9d every renewing operation (F17). About ten rankings may be stored in the memory, however, the rankings of all channels may be stored in the memory. 35

As described above, the steps of F10 to F17 of the flowchart as shown in FIG. 3 are repeated every manipulation of the F key or Ch key to thereby enable the renewing operation of the ranking stored in the memory circuit 9d. 40

Plainly, this discloses recomputing rankings every time the F or channel key is depressed, not after all of the channels have been tuned. Accordingly, the Applicant traverses.

Claims 23 and 41 are allowable for the same reasons

With Respect to Claim 8, 9, 26, 27, 44, and 45: Claim 9 recites reordering the reordered schedule of channels in sequential order in response to a user command. The Office Action indicates that this is disclosed as follows:

As described above, the operation of the flowchart as shown in FIG. 4 is repeated every manipulation of the F key, so that the broadcasting stations are successively selected in the order from a higher grade of tuning frequency to a lower grade of tuning frequency. 10

However, this plainly does not disclose reordering into sequential order at all. The Applicant therefore respectfully traverses.

Claim 8, 26, 27, 44, and 45 are allowable for the same reasons.

In paragraphs (3)-(4), the Office Action rejected claims 6-7, 24-25, 33, and 42-43 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Bedard, U.S. Patent No. 5,801,747 (Bedard).

With Respect to Claims 6, 24, and 42: Claim 6 recites that the schedule of channels is further ordered according to the time elapsed since the last channel was tuned. According to the Office Action, this disclosed by the "last channel viewed" feature of the Bedard reference as follows:

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Referring now to FIG. 3, a viewer profile timer is initiated at step 300 when a television viewer commences viewing a channel. When the viewer tunes (step 302) to a different channel, the viewer profile examines the timer to determine how much time has elapsed (step 304). If the timer indicates that less than one viewing unit has elapsed, no further action is taken and the viewer profile simply restarts the timer (step 306). If, however, the timer indicates that one or more viewing units has elapsed, then the viewer profile determines at step 308 whether the viewed channel is already in the viewer profile array 200. If the viewed channel is already an entry 202 in array 200, viewing unit counters 204 and 206 of entry 202 are incremented (step 308) by one or more viewing units, and the viewer profile then restarts (step 300) the timer for the new channel.

If the viewed channel is not already an entry 202 in viewer profile array 200, the viewer profile searches (step 310) for room in the viewer profile array 200 for a new entry 202. If there is room in array 200, the viewer profile will move (step 312) all existing entries 202 down one position in array 200, insert the new entry 202 at the top of array 200, and restart (step 300) the timer for the new channel. By placing the new entry 202 at the top of viewer profile array 200, it should be evident that the most recently viewed entries will be located at the top of array 200.

Presenting the last channel viewed is not analogous to taking a schedule of channels that has been ordered according to viewing time, and further ordering it according to the time that has elapsed since the channel was viewed. Indeed, the last channel viewed feature is so different from channel surfing feature described in the Applicant's claims, the Applicant also disagrees that there is any teaching whatsoever to make the modification suggested. Accordingly, the Applicant's traverse this rejection.

Claims 24 and 42 are patentable for the same reasons.

With Respect to Claims 7, 25, and 43: Claim 7 recites the reordering of the ordered schedule of channels according to the time period between each of the series of commands comprises weighting at least of the portions of the time periods according to a time difference between a current time and the time when each channel associated with each time period was last tuned. The Office Action suggests this is disclosed in the same portion of the Bedard reference reproduced above, but the Applicant respectfully disagrees and accordingly, traverses. Clearly, there is no such disclosure in Bedard, nor any teaching to make such a modification.

Claims 25 and 43 are patentable for the same reasons.

In paragraph (5), the Office Action rejected claims 10, 11, 28, and 46-47 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Candelore et al., U.S. Publication No. 2002/0104081 (Candelore).

With Respect to Claim 10, 28, and 46: Claim 10 recites that the step of reordering the schedule of channels in sequential order is performed at a time associated with a change in a threshold number of the media programs associated with the channels in the schedule of channels.

The Office Action argues that Candelore discloses this feature when the user chooses the favorites list to present a list of the top 10, rather than the top 15. This is in error. First, the list of the top 10 or the top 15 channels is not reordered in sequential order as described in claim 10. Second, no reordering occurs at all. It is simply a question of whether it is the top 10 or the top 15 that are presented. This does not involve reordering at all. And third, even if "reordering" were to have taken place, it would do so when the user selects the button, not "at a time associated with a change in the media programs associated with channels. Plainly, this rejection is without merit, and the Applicant respectfully traverses.

Claims 28 and 46 are patentable for the same reasons.

With Respect to Claims 11 and 29: Claim 11 recites the steps of determining which of the time periods exceeds a threshold time period, and segmenting the channels into a first segment having channels associated with exceeding the threshold time period and a second segment having channels associated with a time period not exceeding the threshold time period.

The Office Action indicates that this is disclosed by the Candelore because Candelore does not keep track of viewings under a unit of time (5 minutes is given as an example). Plainly, however, Candelore does not measure time periods and segment them into ones that exceed a value and ones that do not. It simply ignores time periods that do not exceed a threshold. Accordingly, the Applicant respectfully traverses.

Claim 29 is patentable for the same reasons.

In paragraph (6), the Office Action rejected claims 12-13 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Candelore as applied to claim 11, and further in view of Trovato et al., U.S. Patent No. 6,445,306 (Trovato).

The Office Action rejects claims 12 and 13, alleging that the categories described in Trovato are analogous to the segments described in claims 12 and 13. They are not. If Candelore is said to disclose the segments by disclosing channels that are ordered (constituting one segment) and channels that are not (constituting another), then the "segments" described in Trovato must also have some reasonable relationship to that definition of segments. It does not, and for that reason, the Applicant respectfully traverses.

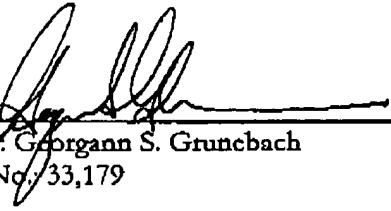
V. Dependent Claims

Dependent claims 2-15, 17, 20-33, 35, and 38-49 incorporate the limitations of their related independent claims, and are therefore patentable on this basis. In addition, these claims recite novel elements even more remote from the cited references. Accordingly, the Applicant respectfully requests that these claims be allowed as well.

VI. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

By:   
Name: Georgann S. Grunbach  
Reg. No. 33,179

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The DIRECTV Group, Inc.  
CA/LA1/A109  
2230 E. Imperial Highway  
P. O. Box 956  
El Segundo CA 90245

Telephone No. (310) 964-4615